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## Two new species and identification note on two poorly known species of the genus *Pachybrachis* CHEVR. (Coleoptera: Chrysomelidae: Cryptocephalinae)

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ABSTRACT. Two new species of the genus *Pachybrachis* CHEVR. (*P. warchalowskii* sp. n. from Turkey and *P. borowieci* sp. n. from Iraq) similar to *P. jordanicus* LOP. are described. The features of aberrant forms of *P. pentheri* GANGLB. and *P. scripticollis* FALD. with similar black pattern on elytra are examined and new key to identification of both species is given.

Key words: entomology, taxonomy, new species, Coleoptera, Chrysomelidae, Cryptocephalinae, *Pachybrachis*, Middle East.

Palaearctic species of the subgenus s. str. of the genus *Pachybrachis* were reviewed by WARCHALOWSKI (2008). In materials studied recently we found specimens representing two new species. Their description is given below. Examination of aberrant series of *P. pentheri* GANGLB. - treated in WARCHALOWSKI's (2008) paper as *species dubium* - and *P. scripticollis* FALD. allowed us to preparation a key to their identification.

### ***Pachybrachis warchalowskii* LOPATIN & NESTEROVA sp. n.**

#### ETYMOLOGY

This species is named after my colleague and friend, famous specialist on Chrysomelidae, A. Warchalowski.

#### TYPE MATERIAL

♂ holotype: Asia min., Elblatan, VI.1967, leg. F. Schubert; ♀ paratype: Mardin, 1300 m, 24.VI.1975, leg. F. Schubert (deposited in the collection of the first author).

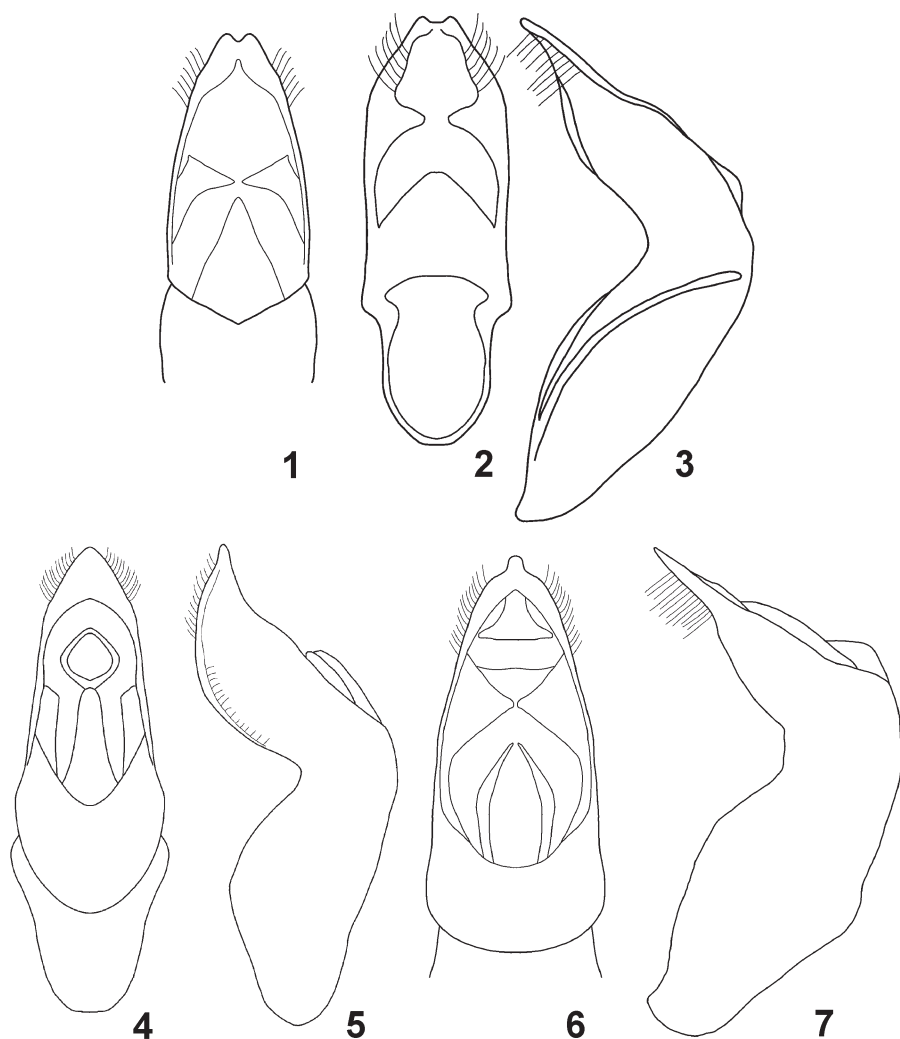
## DIAGNOSIS

Close to *P. jordanicus* LOP. (figs. 4, 5), differs from it in having narrow frons and in form of aedeagus.

## DESCRIPTION

♂ (holotype). Length 3.6 mm, width in humeri 1.6 mm.

Colour rufous-yellow with black pattern: transverse spot on vertex and deriving from it narrow strip between eyes arriving at middle of frons; first 3 segments of antennae



1-7. Male genitalia: 1-3 – *Pachybrachis warchalowskii* sp. n., dorsal (1), ventral (2) and lateral (3) view; 4, 5. *P.s jordanicus* LOP., dorsal (4) and lateral (5) view; 6, 7. *P. borowieci* sp. n., dorsal (6) and lateral (7) view

yellow, last segments pitch-black (ventral surface of 4<sup>th</sup> segment rufous); pronotum with 5 black spots on disc and black basal border interrupted opposite scutellum; scutellum with black basal and apical borders; elytra with black points fusing in small spots on humeral callus, near scutellum and before apical slope, sutural border and lateral border from end of basal third to apex where it joined with sutural border. Legs yellow-rufous, femora rusty-brown with large yellow spot in apical half.

**Head.** Eyes large. Frons between eyes narrow, narrower than width in upper part of eye, sparse punctured. Labrum not large, convex, with row of long fine seta on slightly emarginated edge. Antennae long, thin, proportion of antennomeres as follows: 10 : 5 : 9 : 12 : 13 : 14 : 14 : 12 : 11 : 10 : 10.

**Pronotum** broad, 1,4 times as wide as long; in basal half stronger and in apical half weaker narrowed to angles, posterior angles obtuse. Punctuation distinct and deep, sparse on disc, interspaces larger than punctures, punctures more dense on black lateral spots, fused in some places, spots located on slight lateral impressions.

**Elytra** 2,2 times as long as pronotum and 1,35 as long as wide in shoulders, narrowed behind humeral callus and weakly extended to apical slope. Punctuation of elytra as deep and distinct as punctuation of pronotum, in some places forms bended confused rows.

**Underside and pygidium** black, epimera of mesosternum with yellow spot, finely punctured, seta long, erect in middle of first and last sternites, short and prostrated on other parts. First protarsomere long and widening apically. Claws with weak, blunt tooth at base. Aedeagus – figs. 1, 2, 3.

♀ (paratype). Length 4.0 mm, width 2.0 mm. Color and pattern of upperside as in male.

***Pachybrachis borowieci* LOPATIN & NESTEROVA sp. n.**

ETYMOLOGY

This species is named after Dr. Lech BOROWIEC, well known specialist on world Cassidinae.

TYPE MATERIAL

♂ holotype: Iraq, Irbil nr. Salahuddin, 12.VI.1980, R. Linnavuori leg.; ♀ paratype: the same data (deposited in the collection of the first author).

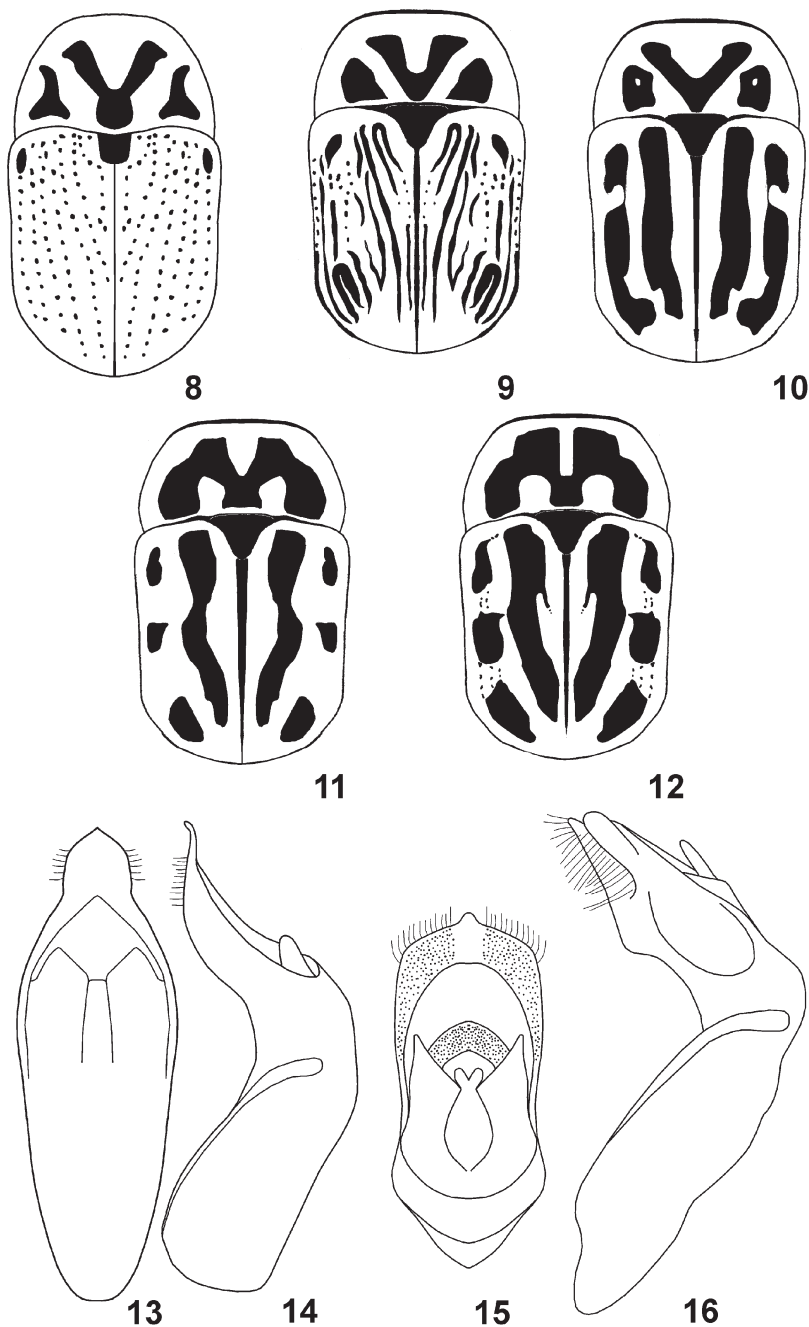
DIAGNOSIS

As previous this species closed to *P. jordanicus* LOP. and differs from it in having narrow frons and form of aedeagus.

DESCRIPTION

Length 3.6 mm, width in shoulders 1.8 mm.

Elongate, parallel-sided, slightly narrowed behind humeral callus, broadest in shoulders. Rufous-yellow, head with black longitudinal furrow in upper half of frons,



8-12. Pattern of upperside: 8-10 – *Pachybrachis scripticollis* FALD., 11, 12 – *P. pentheri* GANGL.; 13-16. Male genitalia: 13, 14 – *Pachybrachis scripticollis* FALD., dorsal (13) and lateral (14) view; 15, 16. *P. pentheri* FALD., dorsal (15) and lateral (16) view

black occiput, small spots above antenna and narrow border on upper half of eyes. Antenna with 5 rufous-yellow basal and pitch-brown other antennomeres.

**Frons** narrow, with deep striae between eyes, distance between upper inner margins of eyes 1,6 times as short as eyes diameter in this place.

Punctuation of frons and clypeus distinct and rather course, only centre of frons without punctures. Antennae long and thin, 3<sup>rd</sup> antennomere 1,9 times as long as 2<sup>nd</sup>, 10<sup>th</sup> and 11<sup>th</sup> antennomere on left antennae and 9<sup>th</sup>-11<sup>th</sup> antennomere on right broken (absent).

**Pronotum** with 5 black spots (2 elongated spots in anterior half of disc, 2 large lateral spots and 1 near scutellum) and basal border interrupted at middle.

Pronotum 1,65 times as wide as long, widest in apical third, gradually narrowed to anterior margin; punctuation dense and coarse, particularly on lateral sides, and sparse along centre of disc. Scutellum small, square and smooth.

**Elytra** with 3 black not large spots along lateral margin, black points fused in short lines in apical half, narrow sutural border shortened in front, lateral row of punctures as black narrow border. Legs rufous-yellow, upper side of femora, middle part of tibia and tarsi brown. Underside black, mesosternum epimera yellow.

Elytra 2,3 times as long as pronotum and 1,4 times as long as wide in shoulders, in central part with weak broad interception, irregular punctuation, form 3 rows on disc only, well remarkable due to black punctures; along lateral margin punctures form rows also; apices of elytra smooth.

Claws with obtuse tooth. Aedeagus – figs. 6, 7.

♀ (paratype). Length 3.7 mm, width 1.8 mm. Punctuation of pronotum sparse and fine.

A KEY TO DETERMINATION OF *PACHYBRACHIS SCRIPTICOLLIS* FALDERMANN, 1837 AND  
*P. PENTHERI* GANGLBAUER, 1905

These species are often confused and distinctness of *P. pentheri* is sometimes questioned. Specimens of *P. scripticollis* with well developed black pattern of upperside are similar to the other species and have nearly same sizes. Main differences between these species are those of punctuation of pronotum and elytra and form of aedeagus, as can be seen in enclosed key.

1. Pronotum with more sparse and irregular punctures, interspaces between punctures in some places 2-3 times as wide as diameter of punctures. Pattern of elytra very variable (figs. 8, 9, 10). Aedeagus with long apical appendix narrowed at apex triangularly (figs. 13, 14). Ventral side of aedeagus roundish curved in profile. Armenia, Near and Middle East ..... *P. scripticollis* FALDERMANN, 1837
- . Pronotum everywhere finely and densely punctate, interspaces between punctures distinctly much less than diameter of punctures. Upperside always with black pattern (figs. 11, 12). Apex of aedeagus rounded, with short tooth. Ventral side of aedeagus in profile curved at angle (figs. 15, 16). Turkey .....  
..... *P. pentheri* GANGLBAUER, 1905

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